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ABSTRACT

The partial immersion program at Key Elementary School (Arlington, Virginia), where half the day is taught in English and half in Spanish, continued to be successful in its ninth year. Reasons for success include: dedication and in-depth understanding of immersion philosophy among principal, coordinator, teachers, and staff; innovations in both English and Spanish portions of the day, especially in approaches to reading and writing; active parent involvement; supplemental federal funding; and continued central office support. Tests indicate participating students have progressed in academic areas as well as or better than other students at their grade level, both within the school and in comparison with state and national norms. Four years of federal funding have enabled the immersion program to improve, enrich, and expand its established program, including addition of a kindergarten program, curriculum development, development and revision of portfolio assessment procedures, in-service training for immersion teachers, English and Spanish language classes for parents, and staff development. Recommendations for the following year include: initiation of a yearly evaluation of the entire Arlington immersion program; establishment of a teacher mentoring program; kindergarten day expansion; continuation of the staff position of immersion program coordinator; and continued increase in student ethnic diversity. (MSE)

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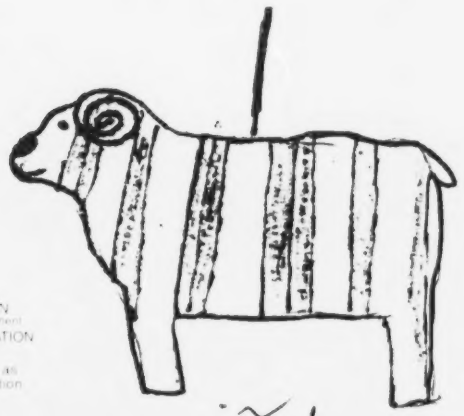
Review of the Ninth Year of the Partial Immersion Program at Key Elementary School Arlington, VA 1994-95



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Review of the Ninth Year of the Partial Immersion Program at Key Elementary School, 1994-95

ABSTRACT

The partial immersion program at Key Elementary School, where half the day is taught in English and half in Spanish, has completed its ninth year. The review of the program, which included classroom observations, interviews with teachers and staff, a two-year case study, and student assessment, revealed a highly successful educational program for grades K - 5.

Some of the reasons the program has been successful are: the dedication of the principal, coordinator, teachers, and staff and their in-depth understanding of the philosophy of the immersion program; the innovations in both the English and Spanish portions of the day, especially in the approaches to reading and writing; the active involvement of parents; supplemental funding from the U.S. Department of Education (Title VII); and the continued support for the program from the central office.

Test results show that students in the partial immersion program have progressed in academic areas as well as or better than other students at their grade level. Students are continuing to improve their Spanish and English skills, and students' oral skills in Spanish continue to improve, as measured by the Student Oral Proficiency Rating (SOPR) scale. Overall, the third, fourth, and fifth grade immersion classes scored higher than the non-immersion classes at Key on the county-wide "Assessment of Writing" in English for the past four years. In addition, results of the Iowa Test of Basic Skills (ITBS) indicate that, for the fifth year in a row, fourth grade immersion students are performing academically as well as or better than those students in the regular classroom, including in those subjects that are being taught in Spanish.

Four years of Title VII funding, now ended, has enabled the immersion program to improve, enrich, and expand its established program. Specific grant activities have included the addition of a kindergarten program, the development of thematic units and curricula, the development and revision of portfolio assessment procedures, in-service training for immersion teachers, English and Spanish language classes for parents, and the attendance of staff at professional conferences.

Five recommendations for this coming year are the following: (1) Initiate a yearly evaluation of the entire Arlington immersion program, including the other elementary immersion programs and the modified secondary program; (2) Establish a Teacher Mentoring Program, for experienced and less-experience teachers, to improve and reflect on instruction; (3) Expand the kindergarten program from half days to full days; (4) Continue the staff position of immersion program coordinator; and (5) Continue to increase the number of ethnically diverse students in the immersion program.

The overall performance of students in grades K - 5 confirms results of other partial immersion programs with both native English and native Spanish speakers and verifies that Key School's model is an appropriate one for educating both English- and Spanish-speaking children.

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Review of the Ninth Year of the Partial Immersion Program at Key Elementary School, Arlington, VA 1994-95

I. Introduction

The Center for Applied Linguistics has been involved in a review of the two-way partial immersion program at Key School in Arlington since the program began nine years ago. The annual review has included observing the partial immersion classes on a regular basis, interviewing students, teachers, other school staff and parents, and recommending student assessments so that the students' achievement can be measured in both Spanish and English (standardized tests, oral language assessments, and teacher evaluations).

A. Background

Foreign language immersion programs in the U.S. were patterned after a Canadian French immersion model, and first began in 1971 with a Spanish immersion program in Culver City, CA. Twenty-five years later, there are now 187 schools with immersion programs in 60 school districts within 26 states, including the District of Columbia (Center for Applied Linguistics, 1995). In the U.S., about one-tenth of one percent of students attend some form of language immersion program.

There are several variants of immersion in practice. In the classic early "total" immersion program model, students begin school in a class where instruction is entirely in their second, or target, language. English is introduced in the second or third grade and gradually increased at each grade level until equal amounts of instruction in the two languages are taught by the sixth grade. In "partial" immersion programs there is less time in the second language. A common partial immersion model is one where instruction is equally divided between English and another language at all grade levels. "Two-way" bilingual, or "two-way immersion" programs integrate language minority and language majority students and provide instruction in, and through, two languages.

Like foreign language immersion, the two-way partial

immersion program allows students who speak the society's majority language (English) to learn a second language. And as in bilingual education, students from a non-English language background acquire literacy and other academic skills in their native language as they learn English. In order to achieve full benefits of two-way bilingual education, balanced numbers of students from the two language backgrounds are integrated for most or all of their content instruction. As a result, peers can serve as language resources and models for one another in an environment that promotes positive attitudes toward both languages and cultures and is supportive of full bilingual proficiency for both native and non-native speakers of English.

A recent study has profiled two-way bilingual programs in over 182 schools in 19 states (Christian and Whitcher, 1995). The most common program is at the elementary grade level and uses Spanish and English as languages of instruction. Although the majority of programs are fewer than five years old, the two-way partial immersion program at Key School is in it's ninth year of operation.

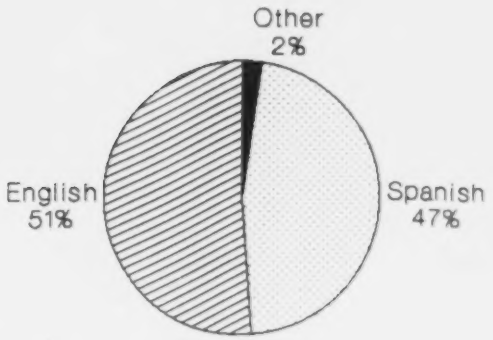
B. Program Design

In the partial immersion program at Key School, classes are taught approximately half the day in English and half the day in Spanish. Since its 1986 inception at the first grade level, the program has added one grade per year. In its sixth year, two kindergarten classes were added with support from a Title VII grant. This year Key expanded it's program to include four kindergarten classes, three first and three second grade classes, two third and two fourth grade classes, and one class in fifth grade. Each class contains both native Spanish speakers and native English speakers, as well as a few who speak another language natively (see Figure 1).

Due to limited available classrooms at the Key School site, for the second year the immersion program has two kindergarten, one first and one second grade class located at the satellite school, Key West. These four classes will return to Key School in school year 1995-96.

FIGURE 1

Native Language
Key School
1994-95



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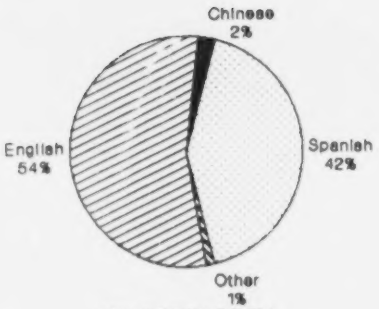
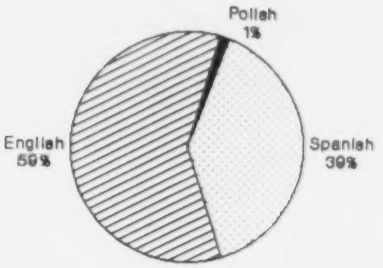
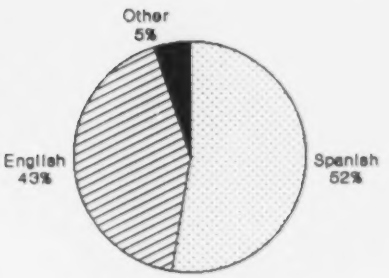


KINDERGARTEN



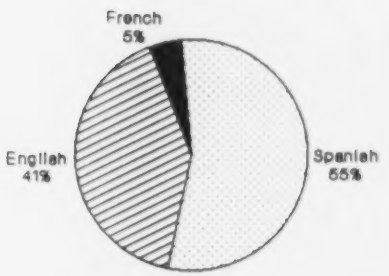
FIRST GRADE

SECOND GRADE



THIRD GRADE

FOURTH GRADE



FIFTH GRADE

Kindergarten students attend the partial immersion program in Spanish for half the day, and Montessori or regular English kindergarten classes the other half of the day. Students in the kindergarten, first, and second grades change classrooms at noon, changing teachers and language of instruction.

Due to the success of the team teaching in the third and fourth grades last year, several subjects are team taught in third, fourth, and fifth grades. For most of the day, immersion students in the third grade have the same teacher for both Spanish and English sessions. However, for integrated English language arts and social studies, the entire third grade at Key School, including immersion, special education, English as a Second Language/High Intensity Language Training (ESOL/HILT), and regular non-immersion students, are divided into five heterogeneous groups. One ESOL/HILT teacher, one special education teacher, and three third grade teachers each have one of the five groups for the entire year.

The fourth grade schedule involves extensive cooperation between immersion and non-immersion teachers. ESOL/HILT students were combined with immersion students to form five math groups, taught daily in Spanish. Spanish and English language arts, science, and social studies are taught in two cycles. Each cycle is ten days long. Cycle I includes Spanish language arts instruction in the mornings and social studies instruction in English in the afternoons. Cycle II consists of Science/Health taught in Spanish in the mornings, and English language arts in the afternoons. For English language arts, students from the two immersion, ESOL/HILT, special education, and Chapter I classes were divided into five groups.

The "special" classes (music, physical education, and library) are typically conducted in English, but there has been an increased awareness of Spanish language activities overall throughout the school and other teachers have incorporated Spanish language and culture into their lessons.

C. Personnel

An experienced immersion teacher, **Irma Heidig,** taught both the kindergarten classes at Key, one in the morning and the other each afternoon. **Susan Baker,** in her third year at Key, taught the Spanish portion of the day to both kindergarten classes at Key West. The English portion of kindergarten at Key West was taught by **Laura Mole. Sandra Lord**, two years at Key, taught the first grade Spanish portion of the day at Key School. **Patricia Axcuna**, in her first year at Key, taught first grade English. **Myrna Paguoga** (teaching in Spanish), and **Jacqueline Martin** (teaching in English), taught one first and one second grade class at Key West. This was their second year with the Key immersion program. At Key School, **Camela Matlock**, taught the Spanish portion to the second grade, and as in previous years, **Ellen Bretz** taught the English portion of the day for the two second grade immersion classes. **Gloria Grimsley** returned to teach the third grade for both the English and Spanish portions of the day and **Carmen De La Cruz**, new to Key School, taught the other third grade in both English and Spanish. Experienced immersion teachers **Carmen Kirsch and Evelyn Fernandez** taught the fourth grades. **Isabel Pawling**, a fifth year teacher, taught the fifth graders during the English and Spanish portions of each day. All ten teachers of Spanish have native-like fluency in Spanish and English, representing the cultures of Cuba, Bolivia, Chile, Colombia and the Dominican Republic or having lived in Honduras, Ecuador and El Salvador.

The principal, **Katharine Panfil**, has extensive experience in foreign language education and administration in the school system. Previously Arlington's foreign language supervisor and Director of Special Projects, she was instrumental in the development of the program and is a key supporter. In addition, the Arlington County Public Schools Foreign Language Supervisor, **Mary Ann Ullrich**, assisted at the county level through support for staff and curriculum development. **Marcela von Vacano**, the Immersion Resource Specialist, serves as Title VII Coordinator.

The role of the program coordinator includes helping to

maintain the climate of the program, providing academic and moral support, disseminating information to parents and educators, conducting public relations, and acting as the voice of the program. All curriculum development work has been achieved by Title VII funds under the leadership of the program coordinator.

D. Class Composition

There are currently 318 students participating in the Key immersion program. Data regarding bussing was not available for kindergarten students. Fifty percent (50%) of those students for whom data was available are bussed to Key from outside the Key School boundaries, but within Arlington County Public Schools' district. Eighteen percent (18%) of those bussed are native Spanish-speaking children, and eighty-one percent (82%) speak English as their native language.

The fifth grade immersion class had 22 students at the end of the year. Of these, 12 were native Spanish speakers, 9 were native English speakers, and one student was a native French speaker. Twenty-one of the 22 students had been in the immersion class the previous year, with one student entering the program in 1994-95. This student had parents who worked for the U.S. State Department and had just returned from Mexico. Two students who did not return moved to other school districts, and two students transferred to the regular Key program.

The two fourth grade classes had 38 students: 18 native Spanish speakers and 20 native English speakers. Thirty-five students who had been in the immersion program the previous year returned. Two of the three students not returning to the program moved from Virginia, and one fourth grade student qualified for special education services not available in the immersion program.

There were 40 students in the two third grade classes: 21 native Spanish speakers, 17 native English speakers, and 2 with "other" listed as their native language. Thirty-nine of the 40 students had been in the immersion program the previous year. Three of the students not returning from last year were placed in the regular program (including special education) at Key School and the other six students moved away. The one new student

entering the program at this grade level was recommended by last year's High Intensity Language Training (HILT) teacher.

The three second grade classes had 61 students: 33 native Spanish speakers and 28 native English speakers. Of the thirteen students who did not return to the program, seven moved from the school, five entered special education programs, and one transferred to the regular program at Key. Two new students who moved into the district were admitted at this level.

The first grade had 76 students in three classes: 30 native Spanish speakers, 45 native English speakers, and one native Polish speaker. Seventy-one children had participated in the kindergarten immersion program. Three students qualified for special education services and were moved to a regular classroom. Two new students were admitted into the first grade.

There were 81 students in the four kindergarten partial immersion classes: 34 native Spanish speakers, 44 native English speakers, two native Chinese speakers, and one with "other" listed as her native language.

Forty-four students did not return to the Key immersion program for 1994-95. Twenty students left the school, including five students who returned to their home schools within Arlington County. Thirteen students left the program for special education services not available in the immersion program. Not counting students who moved out of the area, Key lost **six per cent** of their immersion population from 1993-94 to 1994-95.

Distribution between native language speakers appears to be fairly even this year. In previous years, the immersion population at Key was predominately native Spanish speakers by the upper grades. Possibly the reason for this was that any new students entering into the fourth and fifth grades needed to have grade-appropriate Spanish speaking skills. Since it is very difficult to find native English speakers who are proficient in Spanish, most of the students entering the program in the upper grades are native Spanish speakers. To ensure a more even distribution in the upper grades, it appears that Key School administration is now following a previous evaluation

recommendation by allowing a few more English speakers (45) than Spanish speakers (30) in the kindergarten classes.

While the percentages for ethnicity in the program mirror the native language figures, it should be noted that there are still few Asian and African-American students currently enrolled in this program. Total African-American enrollment is 4.7 percent (15 students) and total Asian is 1.6 percent (5 students) (See Figure 2). This is a smaller percentage than in Key School or Arlington Public Schools (see Table I).

TABLE I
1994-95 REPORTED ETHNICITY (%)

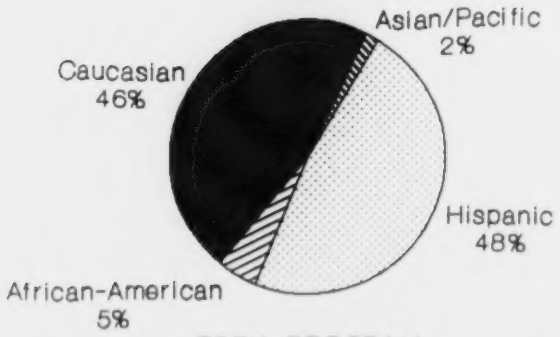
	Caucasian	Hispanic	Afr-Am.	Asian
Immersion	46%	48%	5%	1%
Key School	32%	51%	12%	5%
Arlington County PS	43%	30%	18%	9%

Students at Key School have first priority for enrollment. Students from other Arlington elementary schools may apply, subject to the following criteria: there is an opening in the program, the applicant for grades 2-5 demonstrates proficiency in Spanish and English appropriate to grade level, and parents express a willingness to participate in program activities. If the number of applicants exceeds the number of vacancies at each grade level, students will be placed on waiting lists on a first-come, first-served basis.

The immersion program appears to be including more students with special needs. Although there has been an increase since last year in those students participating in special education in the immersion program, the number of children with learning disabilities and those receiving speech therapy in immersion is not as high as those in non-immersion classes. Thirteen students qualifying for special education services left the immersion program in 1994 but remained at Key School for 1994-95. The total number of students in each immersion class is approximately the same as the number of students in the other classes at Key.

FIGURE 2

Ethnicity
Key School
1994-95



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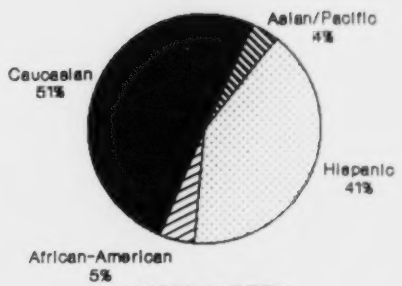
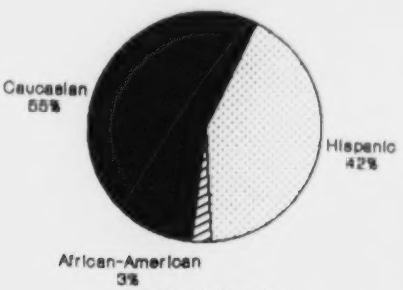
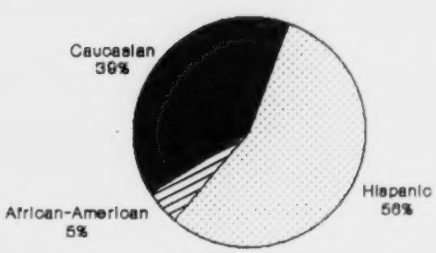


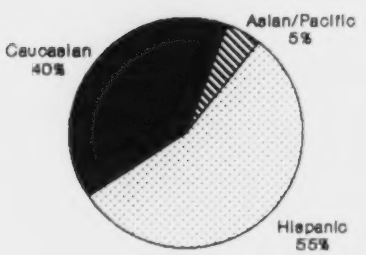
KINDERGARTEN



FIRST GRADE



SECOND GRADE



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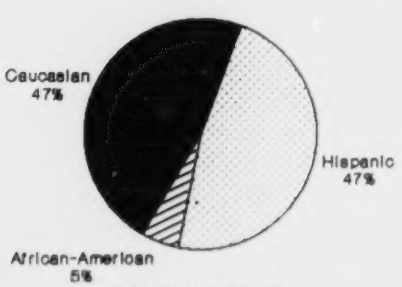
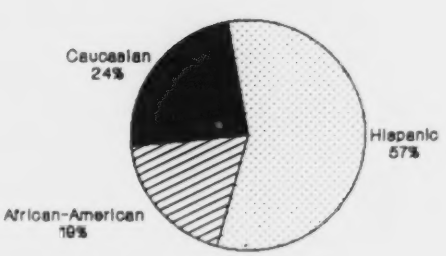


FOURTH GRADE



FIFTH GRADE

The total partial immersion program is comprised of 50% malesand 50% females (see Figure 3). All grade levels had an appropriate gender ratio, with at least forty percent of one gender represented.

Socio-economic status for this report is determined by students' participation in the free and reduced lunch programs. One-fourth of the children involved in the partial immersion program at Key had free lunches and nine percent had reduced lunches (see Figure 4). This is a slight decrease in the number from last year. For school year 1994-95, fifty-seven percent of all Key students had free lunches, and nine percent had reduced lunches.

II. Evaluation Procedures

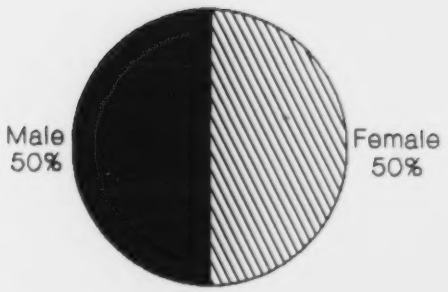
The Arlington school district requested that CAL provide an evaluation of the immersion program's ninth year of operation, specifically to meet federal regulations regarding the Title VII requirement. The CAL staff members who participated in the project included Nancy Rhodes (Co-Director of the Foreign Language Education and Testing Division), Chris Montone (Research Assistant), and Isolda Carranza (Research Assistant). Chris Montone and Isolda Carranza visited Key School three times observing classes and talking with staff members as part of a two-year case study. Susan Barfield, a doctoral student at George Mason University and a CAL consultant, collected the data, conducted the statistical analysis and evaluation of the data, and drafted the evaluation report. Susan Barfield made three on-site visits during the 1994-95 school year. The evaluation was planned as a follow-up to the first through eighth year evaluations and addressed the following questions:

1. What is the English and Spanish proficiency of students in the immersion program, and how does it change from year to year?

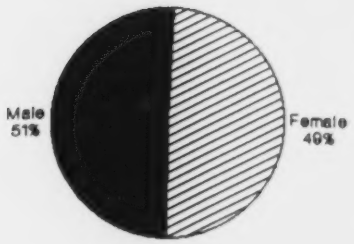
2. How well do the immersion students do in content area subjects? Do they make academic progress comparable to their peers in the same grade?

FIGURE 3

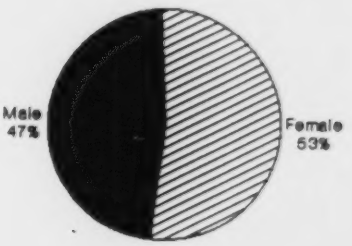
Gender
Key School
1994-95



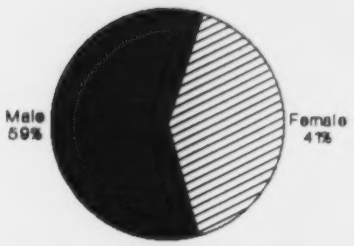
TOTAL PROGRAM



KINDERGARTEN



FIRST GRADE



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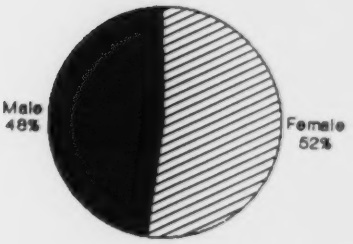
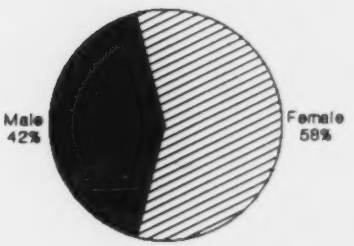
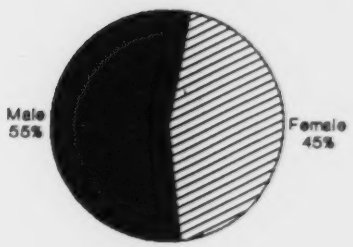


THIRD GRADE



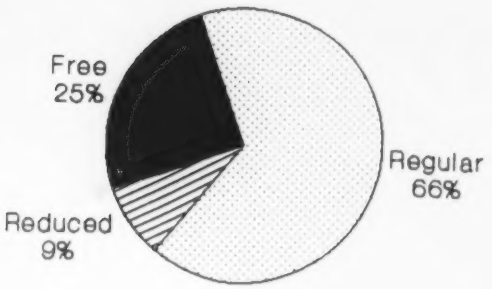
FOURTH GRADE



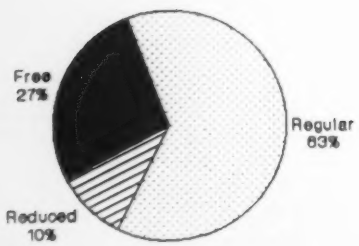
FIFTH GRADE

FIGURE 4

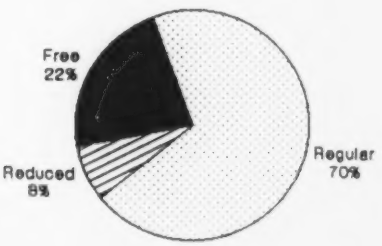
Socio-Economic Status (SES)
Key School
1994-95



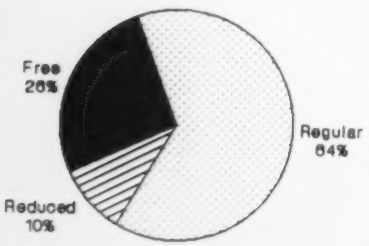
TOTAL PROGRAM



KINDERGARTEN

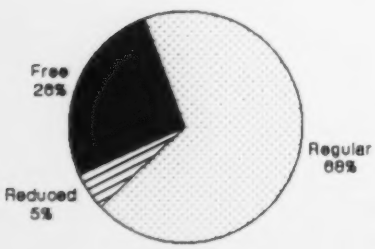


FIRST GRADE

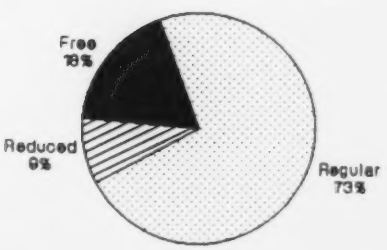


SECOND GRADE

THIRD GRADE



FOURTH GRADE



FIFTH GRADE

3. How might the program be improved?

As Key School has a transient population, it is not possible to have a comparison group of students that can be used on a yearly basis. Thus, comparisons used are the national norms for standardized assessments as well as local statistics on non-immersion classes at Key and in Arlington County.

Because this is the fourth year that Key School is participating in the Title VII Developmental Bilingual Education Program (DBE), 1993-94 test scores were considered the Pre-test Scores, and Post-test scores followed in school year 1994-95.

As in the past eight years, numerous types of information were collected for this review of the program. From October through May, CAL staff conducted classroom observations of the immersion classes, specifically targeting grades two and four. Classes were observed in both the English and Spanish portions of the day in all six grade levels. CAL staff also had the opportunity to talk informally with the immersion teachers, students, and other Key School staff. Teachers in the program, the Principal, the Foreign Language Supervisor, and the Program Coordinator were interviewed during the course of the year to find out their opinions of the program. They also completed Title VII Staff Background questionnaires. Immersion parents were surveyed by written questionnaire the first year of the Title VII funding, 1991-92.

As part of a two-year case study of Key's two-way immersion program (1993-1995), two researchers from the Center of Applied Linguistics observed second and fourth grade immersion classes three times during the year (Fall, Winter, and Spring). Researchers also conducted interviews with teachers, parents, and administrators.

Several kinds of test data were collected on the students to assess their language development and academic progress. The Student Oral Proficiency Rating (SOPR) was used by the teachers to assess Spanish and English speaking proficiency for grades

kindergarten through five. Spanish oral language development was measured by the CAL Oral Proficiency Exam (COPE) in the fifth grade. Key School has chosen to have students in grades three through five take the English Assessment for Writing and this was again expanded to include immersion students in grades one and two as well. A Spanish Assessment of Writing was taken by all immersion students, grades 1-5. The Boehm R Test of Basic Concepts was administered to the first graders again this year to assess the students' conceptual development in English and Spanish. Since all first graders at Key School take the BOEHM in the fall and spring, these scores are available. In addition, a nonverbal test, the Raven's Coloured Progressive Matrices, was given to all first graders at Key this year. All students in Arlington County Public Schools are required to take the Iowa Test of Basic Skills (ITBS) in fourth grade.

The results of these information collection efforts are described in the following sections.

III. Student Progress

Student progress was measured in English and Spanish language development, writing, conceptual development, nonverbal cognitive development, and academic achievement.

A. Oral Language Development

As in the past six years, the Student Oral Proficiency Rating (SOPR) was used by the teachers to assess their students' Spanish speaking skills (see Appendix A). The SOPR provides a measure of a student's ability to understand, speak, and be understood by others in the language he or she is learning. It is focused on oral communication ability considered apart from the ability to read or write in the language. Instead of rating the students during a specific testing time, the teachers use their observations over the year as the basis for rating a student's level of ability. Each student is rated on five categories of oral language proficiency: comprehension, fluency, vocabulary, pronunciation, and grammar. For each category, the student is rated in one of five levels, ranging from 1, indicating little or

no ability, to 5, indicating a level of ability equivalent to that of a native speaker of the language of the same age.

Results confirm previous years' results that the teachers observed a wide range of Spanish proficiency levels at the lower grade levels and that the students improved their skill level as they continued in the program. As the students progress from kindergarten through fifth grades, there are fewer scores at the lower 1 and 2 levels and more at the higher four and five levels.

TABLE II
SOPR (SPANISH) 1995

Grade	N	Mean	SD
K	27	16.85	5.662
1	63	17.35	6.320
2	53	20.23	4.205
3	20	19.85	2.925
4	37	21.95	2.943
5	20	22.50	2.685

However, comparison of mean grade level scores indicates that there was not always progression from one year to another (see Table II). The drop in scores from second to third grade indicates one of the problems of using a teacher-rating scale to compare different classes to each other or from year to year. This concern was noted in previous years as well. Without the reliability of two or more raters, the scale becomes more subjective and just as some teachers are more stringent in report card grades than others, this is possible as well in rating students on this scale.

This concern can be partially remedied by having more than one rater for each student and having all raters meet together to come to a consensus regarding standards. Another possibility is to have the teachers simply rank their students in overall oral proficiency. Looking at the distribution of scores within each grade, it is also apparent that there is not enough score discrimination among students for comparison and progress, especially as the students grow older.

Significant differences in scores (p=.000) were found when

comparing native and non-native Spanish speakers on the SOPR. The native Spanish speakers performed better than the English speakers at all grade levels on this Spanish oral rating scale. Also, students with higher socio-economic status (those not eligible for free lunches) scored significantly higher (p=.000) than students with lower SES (those receiving free lunches). There was not a statistically significant difference when comparing male and female performance.

The CAL Oral Proficiency Exam (COPE) was administered to all fifth graders to assess oral language skills in Spanish (see Appendix B for rating scale). The COPE measures a student's ability to understand, speak, and be understood by others using an oral interview/role play situation with two students at a time. The test measures cognitive-academic language skills (the ability to discuss subject matter effectively, such as social studies, geography, and science) as well as social language (the ability to discuss family, recreational activities, interests, etc.). Each student's proficiency is rated in terms of comprehension, fluency, vocabulary, and grammar using a simplified holistic scale based on the ACTFL Proficiency Guidelines. The 9 possible scores range from junior novice (low, mid, high); junior intermediate (low, mid, high); to junior advanced, junior advanced plus, and superior. The students are given a numerical rating from 1 - 9 corresponding to the appropriate level for each category. Role play/discussion topics include: greetings, program of studies, the cafeteria, timelines, using the library, fire drills, social studies trips, school buses, the movies, social life, a party, a science project, future careers, an accident, a fight, unfair rules, and science equipment.

Fifth grade native English speakers. There was a wide range of abilities on the 1994-95 COPE. The fifth grade native English speakers' scores ranged from 4 to 9 (Junior Novice High to Junior Advanced Plus). For the fourth year, their average comprehension score, the highest of the four skills, was at the Junior Advanced level where they "understand academic talk and social conversation at normal speed. . ." As last year, the

lowest mean of the four skills was Grammar; Vocabulary was at the Intermediate-Mid level and Fluency scored at the Intermediate High level.

Due to the limited number of English students tested (9 students) in the fifth grade this year, it is not possible to make any generalizations regarding the English speakers.

Fifth grade native Spanish speakers. Twelve fifth grade native Spanish speakers' scores ranged from 4 to 9 (Junior Intermediate Low to Superior). Like all the other subgroups, their highest score was in Comprehension, scoring at the Junior Advanced Plus level. In the other three subtests (Fluency, Vocabulary, Grammar), students scored at the Junior Advanced Plus level, with slightly lower means.

There were differences between the English and Spanish speakers on all four subtests. Spanish speakers scored significantly higher on these subtests, as well as on the COPE total score, than English speakers. There were no significant differences on the total score between males and females, limited-English proficient and non-limited English proficient students, or students with different socio-economic status.

Several conclusions can be drawn from the COPE results. First, as did the last three years' students taking this exam, the fifth grade class scored higher in *comprehension* than in vocabulary and grammar. This reinforces previous research done by Swain (1982) with immersion students and by Rhodes, Thompson and Snow (1989) on previous administrations of the COPE test, that shows that immersion students develop high level listening skills.

The COPE results demonstrate the students' high level of comprehension and provide a clear picture of their fluency. The results also confirm a hierarchy of language skills acquired in the immersion setting. As found with immersion students at other schools, the students are strongest in listening comprehension, followed by fluency, and vocabulary/grammar.

B. English and Spanish Writing Development

All five grades have focused on the writing process this year, both in Spanish and in English. The third, fourth and fifth

grades participated in the county-wide "Assessment of Writing" along with all other third, fourth, and fifth graders in Arlington County. First and second grades collected English writing samples that were graded on the same holistic county-wide scale.

English Writing. Students wrote a paragraph writing assignment on a given topic that was scored holistically on a scale from 1 to 8 (see Appendix C for Rubric for Assessment of Writing). Two different raters rated each writing sample. This year the scoring system remained constant across all five grades. The first and second grade submitted one writing sample in the spring. The first grade mean was 3.6, a gain of over one point from last year's first grade mean. The second grade average was 5.0, up from 3.25 the previous year. The third grade immersion classes scored an average of 2.8 in the fall and 4.0 in the spring, showing a gain of 1.2 points. The fourth grade immersion classes scored an average of 3.2 in the fall and 4.9 in the spring, showing a gain of 1.7 points. The fifth grade immersion class scored an average of 3.6 in the fall and 4.6 in the spring, showing a gain of 1.0 points (see Table III).

TABLE III
Assessment of Writing - English (1994-95)

Grade	Fall	Spring	Gain
1		3.6	
2		5.0	
3	2.8	4.0	1.2
4	3.2	4.9	1.7
5	3.6	4.6	1.0

Overall, the average for all grades in the Assessment of Writing in English improved from 3.70 in spring of 1994 to 5.21 in spring of 1995. The third, fourth and fifth grade immersion classes scored higher in their individual grade levels in both fall and spring than all other non-immersion classes, grades 3-5, with one exception. One non-immersion class in the fifth grade averaged 4.8 on the spring Assessment of Writing testing, and the fifth grade immersion class averaged 4.6.

Last year statistical analysis showed immersion females (mean=3.62) scored significantly (p=.01) higher than immersion males (mean=2.95) on the spring English writing sample. This year there were no significant differences between gender on this test. There were also no significant differences between students with different socio-economic status. However, English speaking students in the immersion program did score significantly (p=.00) higher than native Spanish speaking immersion students and non-limited English proficient students (mean=4.64) scored significantly (p=.01) better than limited-English proficient students.

Confirming previous years' test results, it is apparent that the students' Spanish studies have not had any negative effect on their English writing skills, and perhaps have enhanced their English writing skills in comparison with other students. This is especially noteworthy, of course, since immersion classes have only been receiving half of their daily instruction in English (and thus approximately half as many assignments in English as the comparison classes).

Students and teachers are also responsible for collecting material for each child's "Assessment Portfolio." Each Assessment Portfolio is required to have at least one sample from the following categories: (1) Reading response samples appropriate to grade level (book lists, response logs, book cards, book reports); (2) Writing samples appropriate to grade level (poetry, letters, research projects, journals, essays, comparisons, descriptions, opinion papers); and (3) teacher/student observations (student/teacher conferences, self-evaluation, narratives, student and/or teacher checklists, peer assessments, other adult [tutor, parent] assessments). This will be important data to be used when evaluating the whole language teaching approach.

Portfolio assessment at Key School continues to be revised each year. The evaluator did check to see that all teachers are keeping student portfolios. The immersion staff is now in the process of deciding how to evaluate these portfolios.

Spanish Writing. An assessment of writing in Spanish was given to grades one through five again this year. Results indicate the following means:

TABLE IV
Assessment of Writing - Spanish (1994-95)

Grade	Mean
1	3.87
2	4.88
3	not available
4	5.00
5	4.30

As the above table indicates, there was significant improvement from the first to second grade scores. The fifth grade scored lower overall than the fourth grade classes. (This same class scored lower than the students one year younger last year.)

The overall mean increased from 3.44 in 1993-94 to 4.88 in 1994-95. As in 1993-94, there was a statistically significant (p=.00) difference between the males (mean=4.10) and females (mean=5.09). Native Spanish speakers (mean=4.99) scored significantly better (p=.003) than native English speakers (mean=4.19), although there were no significant differences between limited-English proficient students and non-limited English proficient students. There were no significant differences between students receiving free lunches and those not receiving free lunches.

C. Conceptual Development

The Boehm Test of Basic Concepts is designed to measure children's mastery of concepts considered necessary for achievement in the first years of school. Boehm test results may be used both to identify children with deficiencies in this area and to identify individual concepts on which the children could profit from instruction. The test consists of 50 pictorial items arranged in approximate order of increasing difficulty. The examiner reads aloud a statement describing each set of pictures

and instructs the children to mark the one that illustrates the concept being tested. The Boehm test was administered to all Arlington County first graders in the fall and the spring. (The test is not administered to other grades.) Scores reported below represent the group averages for the immersion students.

On the **English** version of the fall testing of the Boehm, the immersion first graders averaged 84%. In the spring, the first graders' average increased to 92% correct. Non-immersion first grade classes averaged 70% in the fall and 82% in the spring. These percentages were within one percent of the same scores from last year, 1993-94. All three first grade immersion classes scored higher than the three non-immersion first grade classes for the 1994 fall and 1995 spring tests.

On the **Spanish** version of the Boehm in the fall, the immersion first grade averaged 64% correct. By spring, the total correct increased to 82%. As with the English version, this was a statistically significant improvement (p=.000).

D. Nonverbal Cognitive Development

The Raven's Coloured Progressive Matrices were administered to all first grade students at Key. This nonverbal test requires the eduction of relations among abstract items. The items consist of a set of matrices, in which one part has been removed. Children must choose the missing insert from given alternatives.

The average Raven's score for first graders in the immersion program was the same as last year's, 77. There were no significant differences between the males (mean=78) and females (mean=76), but there were significant differences (p=.01) between the English speakers (mean=82) and the Spanish speakers (mean=67). Non-limited English proficient students (mean=82) scored significantly (p=.00) better than limited English proficient students (mean=65). There were no significant differences between students of different socio-economic status.

E. Academic Achievement

Iowa Test of Basic Skills (ITBS). All fourth graders in Arlington Public Schools were administered the standardized Iowa Test of Basic Skills (ITBS) in March 1995 (see Table V). The two

fourth grade immersion classes scored at the fifth or sixth grade level in **all** areas and were at or above the 58th percentile in all areas when compared to a national sample. They were at the 93rd percentile in mathematics (math concepts, problem solving, and computation), at the 89th percentile for work study skills (visual materials and reference materials), at the 84th percentile in science, at the 86th percentile in social studies, at the 79th percentile for language (spelling, capitalization, punctuation, and word usage and expression), at the 85th percentile in reading comprehension, and at the 87th percentile in vocabulary (see Figure 5).

Although the immersion classes scored higher than the non-immersion classes in all ITBS subtests, it must be noted that eight of the immersion students took the test in a "non-standardized" manner, and thus their scores were not used in the computation of class averages. This would impact the overall results, inflating the scores.

TABLE V
1995 Iowa Test of Basic Skills
(Fourth Grade)

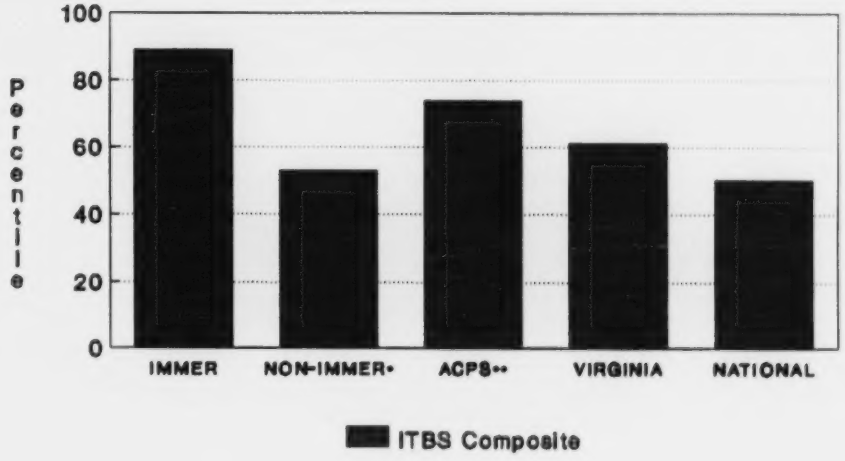
	Lang.	Math	Comp.	Soc.Std.	Sci.
Immersion - Key	79	93	89	86	84
Non-immersion - Key	45	68	53	49	66
Arlington County PS	71	81	74	76	79
State of Virginia	64	66	61	65	71

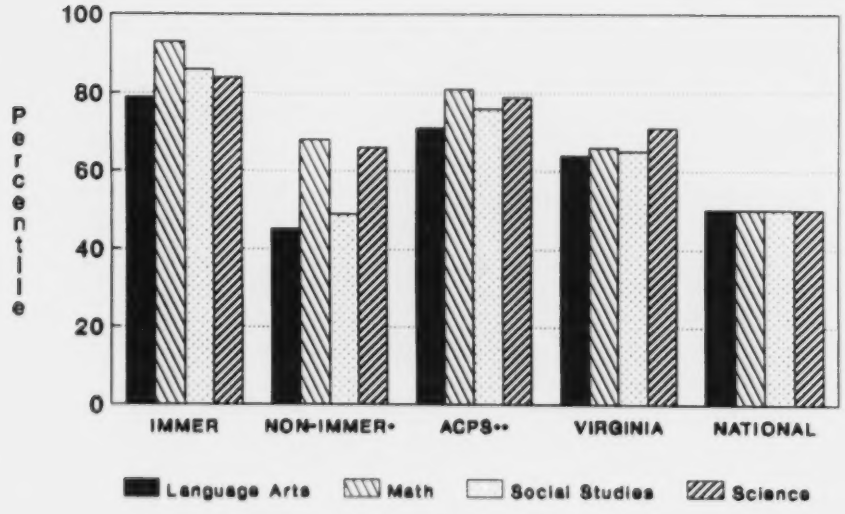
(Percentiles)

When comparing native and non-native English speakers on the ITBS, the native English speakers scored significantly higher for all six academic areas (reading comprehension, language, mathematics, social studies, science, and test composite). Non-limited English proficient students scored significantly better than limited English proficient students in all areas as well. Students with higher socio-economic status (not eligible for free lunch) scored significantly above those students with lower socio-economic status (eligible for free lunch) in all six areas. There were no significant differences in any of the six areas with

FIGURE 5

Iowa Test of Basic Skills
Key School (1994-95)
(Fourth Grade)





•Other fourth grade class at Key
••Arlington County Public Schools

regard to gender.

Although historically there has never been a "control" group of students for the immersion class because of the transient student population at Key, this year twelve fourth grade immersion students were matched with twelve fourth grade non-immersion students. Matched variables included gender, ethnicity, socio-economic status (SES), native language, and ESOL/HILT placement. Comparison of NCE means for seven scores (vocabulary, reading comprehension, language arts, work study skills, math, social studies, science) as well as the ITBS composite score indicated matched immersion students scored significantly better than matched non-immersion students in all areas. When comparing all the non-immersion fourth grade students as one group, the immersion class scored higher in all thirteen subtests, including vocabulary, reading comprehension, spelling, capitalization, punctuation, word usage and expression, work study skills (visual), reference skills, mathematical concepts, problem solving, computation, social studies and science.

These results are especially interesting in light of the fact that, while the immersion students have been studying science, social studies, and/or mathematics in Spanish, they are still scoring higher on the ITBS in English than their peers who were studying only in English.

Confirming fourth grade scores from 1991-94, ITBS results show that, for the fifth year in a row, *students participating in the immersion program at the fourth grade level are performing academically as well or better than those students in the regular classrooms, including in those subjects that are being taught in Spanish.*

Arlington Objectives Mastery Test (Mathematics). The Arlington Objectives Mastery Test (AOMT) in mathematics is given to third and fifth grade students at the end of each school year. This test was developed by Arlington County Public Schools to assess students' mastery of Arlington County's educational objectives in mathematics. The evaluator received data for one third grade immersion class, one third grade non-immersion class,

one fifth grade immersion class, and one fifth grade non-immersion class.

Scores of the AOMT reflect the percentage of students mastering each objective. There are seventeen objectives in the third grade AOMT (mathematics) and eighteen objectives in the fifth grade AOMT (mathematics). Mastery of an objective is defined by the school as one in which scores fall at 80% mastery or better. Of the sixty-one third grade students at Key School with reported AOMT scores, over half (33 students) were exempted due to ESOL/HILT and/or special education placement. Of the seventy-six fifth grade students with reported scores, 33 students were exempted due to ESOL/HILT and/or special education placement.

All seventeen third grade mathematics objectives were achieved by the immersion third grade class. The non-immersion third grade class achieved ten of the seventeen objectives. The immersion fifth grade class mastered ten of the eighteen mathematics objectives, and the non-immersion fifth grade class mastered eight of the eighteen objectives.

IV. Additional Information

A. Student Activities

All classes participated in the regular Key School activities, as well as several night performances and meetings. There was a special program celebrating the Hispanic Heritage in October 1994, which included songs, poems, and plays in Spanish and English (see Appendix D).

On Wednesday, March 8, 1995, the fourth grade immersion classes presented a literature skit in Spanish at Georgetown University for *A Celebration of Bilingual Immersion* pre-conference session of the Georgetown University Roundtable on Languages and Linguistics.

Key School was also mentioned as a school which "has drawn national praise for the success of its nine-year program" in an article in the December 5, 1994 *Community College Week* newspaper publication.

B. Parent Activities

The parents continue to be an essential and active component in the Key School immersion program. The parent advisory committee meets five times a year, there is a parent feedback night, and numerous parents volunteer in the classes and at school.

Both English and Spanish language classes were offered to parents this year. In November and December of 1994, two Spanish for Parents classes (beginning and intermediate) were presented. Eleven parents participated in the beginning level and nine parents participated in the intermediate level. English for Parents was offered in March and April of 1995. Twelve parents began the class, three of which finished the class. The average number of parents per class was seven.

C. National and Local Presentations

Marcela von Vacano, Key Title VII coordinator, was involved in two presentations at the National Association for Bilingual Education (NABE) conference in Phoenix, AZ in February 1995. She presented *The Elements of the Portfolio for a Developmental Bilingual Education Program* and participated with three other professional educators on *Raising a New Generation of American Bilinguals: The Role of Parents.*

Gloria Grimsley, third grade immersion teacher at Key, and Marcela von Vacano also made a presentation for a Bowie State University education class on March 23, 1995, on team building and human relations.

D. Visitors

The two-way partial immersion program at Key School hosts many visitors throughout the year. In addition to parents of students currently enrolled in the program, parents interested in possible enrollment for their child(ren) may visit and observe classrooms. The Center for Applied Linguistics videotaped several classrooms in October as part of a video series for the National Center for Research on Cultural Diversity and Second Language Learning. The following is a partial list of visitors to the program for school year 1994-95:

Vistors	Location
Commissioner of Education Board Members	Curacao, Netherland Antilles
Center for Applied Linguistics	Washington, D.C.
National Center for Research on Cultural Diversity and Second Language Learning	Santa Cruz, CA
BIP Advisor	Los Angeles, CA
Teachers from ALL Conference (16)	San Antonio, TX Fairfax, VA Anchorage, AK Laurel, MD
Teachers/Administrators (14)	Washington, D.C.
Teacher (1)	Phoenix, AZ
Teachers (15)	Sweden

E. 1994 Summer School

Seven kindergartners, 6 first graders, 4 second graders, 5 third graders, and 2 fourth grader attended immersion summer school (total of 24 students, one class). Two-thirds of the summer school class (16 students) were native English speakers. This summer Spanish language program enabled the students to acquire, practice, and maintain their Spanish language skills.

V. Questionnaires, Observations, and Interviews

A. Questionnaires

A Title VII DBE Project Staff Background and Instructional Program Questionnaire was filled out by each staff member involved with the partial immersion program at Key School. In addition, the evaluator held both formal and informal interviews with different staff members, including teachers, the principal, the program coordinator, and the Arlington Foreign Language Supervisor.

Everyone believed that the administration showed strong support for the program, was a good resource for information about program implementation and materials, and was knowledgeable about

developmental bilingual education (DBE). According to the survey, they have enough necessary instructional resources and materials to function, but as in several previous years, teachers asked for additional planning time. Most of the partial immersion teachers believe non-DBE teachers in their school are well informed of the program, but their opinions are split regarding how non-DBE teachers perceive the program. The immersion teachers continue to be closest to those teachers within the partial immersion program, especially those teachers who are more isolated from the main building at Key West. However, the Key West program will move back to the main Key School building in 1995-96. The integration of the third and fourth grade immersion programs with regular, ESOL/HILT, and special education programs (in some academic areas) has allowed increased communication and interaction between immersion and non-immersion teachers.

B. Second Year Summary of CAL Research Case Study

Researchers Isolda Carranza and Chris Montone from the Center for Applied Linguistics are involved in a two-year case study of Key's two-way immersion program as part of the National Center for Research on Cultural Diversity and Second Language Learning. Last year (1993-94), they observed immersion classes in first, third, and fifth grades three times during the year (fall, winter, and spring). This year grades two and four were observed. The following are excerpts from a summary prepared for this report:

In Year 2 of the case study of Key's two-way immersion program, immersion classes in grades 2 and 4 were observed three times during the year (fall, winter, and spring). Each visit lasted one day. The researchers did not remain with the teachers all day, but followed the class of students whenever they changed rooms.

During all three rounds of observations, focal students of both language backgrounds, chosen in Year 1 for their success in second language proficiency, were observed more closely to identify their learning and language habits. The same focal students observed in third grade in Year 1 were observed in fourth grade this year. (There were no focal students in first grade in

Year 1; thus, there were none in second grade this year.) During the third round of observations, focal students' written work was collected in English and Spanish.

After the second round of observations, the researchers interviewed the three principal teachers observed, the second fourth grade immersion teacher, and the immersion specialist. The interviewees were asked to describe their classes and/or the program and its practices, to describe how they separate languages for instruction, to compare language learners from different language backgrounds, and to discuss classroom practices, student success, and program success. The immersion specialist was asked to describe and comment on changes to the immersion program since the previous year.

Summary of Classroom Observations

Learning Environment

Cooperative pair and/or small group work was routinely observed in all classes visted except second grade English. In all classrooms, students are seated next to each other and are encouraged to assist each other in the completion of many academic tasks. The classrooms, for the most part, contain numerous educational resources (e.g., globes, science equipment, dictionaries). In classrooms used for instruction in only Spanish or only English, displays reflect the sole use of one language within the classroom. The teachers generally provided positive feedback and reinforcement to the students. In both grades observed, the Spanish-language teachers created incentives for students to use Spanish in the classroom, sometimes issuing rewards for those students or groups who used Spanish the most. (See *Student Language Use*.)

Negotiation of Meaning

The teachers employed a variety of strategies for making content and language clear to the students. Manipulatives, graphic organizers, visual support (e.g., overhead projector, blackboard, realia, show and tell), and kinesthetic activities (e.g., mini-dramas, miming, Total Physical Response [TPR]) were

used frequently. Visual displays in all rooms served as models of language, references, and reinforcement.

With regard to language strategies, second grade teachers generally spoke clearly and at a slightly slower pace, especially during explanations of instructions or new material. In the fourth grade, the teachers tended to speak at a natural pace. Additional strategies aimed at making meaning clear and modeling language were repetition, re-phrasing, paraphrasing, and leading. Teachers also encouraged students to help each other by providing answers, explanations, and language (modeling). The students in both grades were willing to help their classmates by explaining procedures to those who may not understand.

The teachers also used a variety of means to check student comprehension. Teachers very infrequently asked the students explicitly if they understood. The second grade teachers relied more on monitoring the students' actions and work. The fourth grade teacher had students do presentations and projects, and allowed students to ask and answer each other's questions to demonstrate their comprehension. Students also brought work (and questions) to the teacher.

Some students in the second grade also received pull-out Chapter 1 support in reading.

Teacher Language Use

Separation of Languages

All teachers generally remained faithful to the separation of languages, speaking Spanish only during Spanish time and English only during English time. Even when students spoke to the teacher in the other language (especially English during Spanish time in second grade), the teachers would respond in the appropriate language of the time of day.

Error Correction

Little explicit correction of students' linguistic errors was observed in the second grade classrooms this year, apart from those that normally are made during Spelling or Language Arts. Rather, teachers usually accepted student responses and either modeled the appropriate language, re-phrased, paraphrased, or

extended the student's utterance, thereby serving as a model. More oral correction of students' linguistic errors was observed in the fourth grade Spanish classes this year, as a result of the incorporation of explicit Language Arts instruction. In some cases, the teacher would model the language and ask the student or the entire class to repeat. This was usually done with unfamiliar words in isolation. In other cases, the teacher would repeat a word the student had said incorrectly, implicitly prompting him/her to self-correct.

In addition, an explicit language component had been added to the fourth grade Spanish curriculum. As a result, more attention was given to the structure of the Spanish language. This year the researchers noted that the fourth grade Spanish teacher prompted more students to self-correct grammatical errors related to topics covered in the Language Arts curriculum (e.g., inflections of person, preterit tense formations).

Student Language Use

Separation of Languages

The students usually remained faithful to the separation of languages when speaking directly to the teacher. In the second grade Spanish classroom, however, English was often used whenever the teacher was not the direct addressee. The fourth graders showed higher levels of Spanish use in similar situations. However, more cases of students addressing the teacher in English during Spanish time were observed in both grades this year than in Year 1. English words and phrases were very often uttered by all students when at a loss for the Spanish equivalents, but there were few, if any instances of students uttering Spanish words when at a loss for the English equivalents.

When speaking amongst themselves, English was the predominant language in classrooms when the students did not fear being punished for using English during Spanish time. (The promotion of Spanish usage through creative incentives, as mentioned earlier, helped counteract this trend temporarily.) Among all students, use of Spanish during English time was infrequent and usually limited to an occasional word or phrase. English usage by all

students for social purposes during Spanish time seemed to be equally preponderant in the second and fourth grades. For academic purposes, English was used more in second grade due to a lack of familiarity among native English speakers with the Spanish language—a situation which was not paralleled in fourth grade. In most cases, when teachers became aware of the students' use of the inappropriate language, they issued a reminder. This was not done as often or consistently in second grade as in fourth. (The teachers' behavior, for the most part, was consistent with what they reported in interviews that they would recommend a teacher do in similar situations.)

Fluency and Accuracy

The second-graders appeared to be quite comfortable with English. In Spanish, most students could utter half a sentence before switching to English. The most advanced language learners could complete a sentence in Spanish, but would usually switch to English at some point in the following sentence. The present tense was the only tense used, and the typical structure of sentences was subject-verb-object. Verb-adjective structures are also prevalent (e.g., *Es azul.* It's blue.) A few native English speakers achieved at very high levels, in some cases completing their assignments faster than native Spanish speakers. At the other end of the spectrum, a few native English speakers still did not speak much in Spanish, but appeared able to comprehend oral and written Spanish. Student writing includes invented spelling, though less in English than in Spanish, possibly because the English teacher taught language arts daily.

Among the fourth graders, it was difficult to distinguish between the native Spanish and native English speakers when they spoke in English. In Spanish, although they still lacked vocabulary, the English speakers had a greater degree of fluency than students in lower grades. Explicit language arts instruction was provided this year, and the students demonstrated better command of verb inflection. In addition, the students seemed to know how to conjugate some verbs in the preterit tense. They also had begun to use object pronouns, though they did not always

position them correctly in sentences.

The most common errors observed in students' oral Spanish were the following:

- word order (influenced by English word order)
- number agreement between subject and verb
- word choice
- gender agreement between nouns and articles
- gender agreement between nouns and adjectives

There was still some concern among teachers–as expressed in interviews–that there are just not enough opportunities to use Spanish during the day to ensure higher levels of proficiency, given that electives (e.g., art, music, P.E.) are in English and the students are surrounded by English when they leave the school. This may at least partially account for continued lack of grammatical accuracy in spoken Spanish.

Teacher Preparation

Coordination

In general, the teachers coordinate well, meeting on the average of once a week to discuss such issues as amount of homework, thematic units, projects, field trips, and problem students. The second grade Spanish teacher, in her second year teaching, felt she would benefit by more coordination, while her counterpart, a much more experienced educator, felt the amount of coordination was adequate.

Teacher Training

Teachers are offered lectures/workshops on various topics related to their work, such as second language acquisition, by the immersion specialist. These occur once a month on Wednesday afternoons, since Wednesday is an early release day.

VI. Four-Year Summary of Title VII-Funded Project

A summary of the four years of Title VII funding indicates that the Key School two-way partial immersion project is an excellent educational program. Evaluations have included observations, interviews, questionnaires, surveys, case studies, self-studies, student data collection, and quantitative, qualitative, and alternative assessments.

The Title VII project began in 1991-92 when the Key School immersion program had been in existence for five years. Two kindergarten classes were added in 1991-92 to the already established first through fifth grade program. Total student enrollment for that 1991-92 school year was 180 students. Each year the program expanded and now has 318 students in school year 1994-95. Student enrollment has increased 77% since 1991-92.

Student variable percentages of gender, ethnicity, limited English proficiency, native language and socio-economic status have remained fairly constant in the four project years. Approximately half of the students are male, and half are female. Hispanics comprise around 50% percent, Caucasians 38-46%, African-American 4-7%, and Asian 1-2% of the program population. Native languages are divided evenly between Spanish and English, with only a few students representing four other native languages. Thirty-four to 42% of the immersion students qualify for reduced or free lunches.

Approximately 40-50% of the participating students are bussed. Although student enrollment is determined for those students outside Key boundaries by lottery using native language and gender as variables, most bussed students are native English language speakers and bussed in from areas outside Key School boundaries, but within Arlington County. There is a higher percentage of these students who are labeled as gifted and talented than in the regular school population.

Immersion student attendance for the last four years has been equal to or better than that of non-immersion students. The program also has had little attrition, or loss of immersion students, from year to year at the elementary level. The majority

of the few students who drop out of the immersion program at the elementary level have moved from the school district. The second most common reason for program withdrawal is the need for special education services that are not available in the immersion program.

Although there has been a slight increase in the last two years in the number of special education students involved in the immersion program, there are still fewer special education students per classroom in the immersion program than in the non-immersion programs. However, during the last two years, students from the immersion, ESOL/HILT, and special education programs have been integrated for selected subjects in the third and fourth grades. This practice will continue into the 1995-96 school year.

This student integration is a good example of the many different educational strategies that the immersion program investigates. In each of the past four years, new strategies have been explored and piloted. Those strategies which appear successful are adopted by interested teachers, and those which are not as effective are dropped. A few successful methods that are now being used are the student integration, mentioned above, and the Multiple Intelligences Model. The ungraded primary classes is an example of a program discontinued after an initial pilot.

Because there are so many different teaching strategies and scheduling patterns in the program, including whether students have one teacher all day (half day English/half day Spanish) or two teachers (one half-day English teacher and one half-day Spanish teacher), conclusions about which teaching strategies and scheduling patterns are most successful are difficult.

An asset of the program is its commitment to curriculum development. Each summer during the Title VII project years, teachers developed curriculum units for use the following year and also made them available for wider distribution at professional conferences.

Yearly investigation into newly developed assessments is another asset of the immersion program. Key School has also examined many different existing student assessments as well as

developed several new instruments. Portfolio assessment has been implemented and revised annually.

In addition to the portfolio assessment, several standardized tests were given all four years of the Title VII project. These included the Student Oral Proficiency Rating (Spanish) at all grade levels, the BOEHM (English and Spanish) at grade one, the Assessment of Writing (English) in grades three through five, the Iowa Test of Basic Skills (English) at the fourth grade, and the CAL Oral Proficiency Exam in grade five.

Because the Student Oral Proficiency Rating (SOPR) is a teacher rating scale, it is difficult to draw conclusions regarding student oral language progress from year to year. As mentioned earlier in the report, teachers vary on their personal assessment of individual students on this scale, and without the reliability of two or more raters, student scores can differ widely from classroom to classroom. However, there does appear to be an overall pattern of progress. Overall, students' oral Spanish skills appear to improve each year. In addition, native Spanish speaking students have scored significantly higher than native English speaking students in all four years.

First grade immersion students taking the BOEHM (English) have scored higher than first grade non-immersion students in the four years of the Title VII project. BOEHM scores have also been consistent from year to year, ranging from 91 to 94. The BOEHM (Spanish) scores are consistent as well (ranging from 82-86), although the means are significantly lower than the BOEHM (English).

Comparing four years' scores on the Assessment of Writing (English), students in the immersion program (grades 3-5) had higher class averages than non-immersion classes with only two exceptions. The grade 3 immersion class in 1992-93 and the grade 5 immersion class in 1994-95 had lower, but not significantly lower, class means than one of the non-immersion classes for that year.

Results of the Iowa Test of Basic Skills (ITBS) from 1992-95 indicate that overall Key School immersion students are scoring as

well as or better than non-immersion students in all academic areas (see Figures 6 & 7). These students always placed well above the national average and usually equal to or above the Arlington County and Virginia State means. Mathematics appears to be a program strength, as the immersion students scored higher in mathematics than the other subtests for the last five years. (It must be noted that these scores are for immersion students who were not exempted from the testing due to limited English proficiency or special education concerns.)

For four years, the CAL Oral Proficiency Exam (COPE) was given to all fifth grade students (only ten selected fifth grade students in 1991-92). As can be expected, native Spanish speakers scored higher than native English speakers. Every year, both groups scored higher in comprehension than fluency (the second highest), grammar or vocabulary.

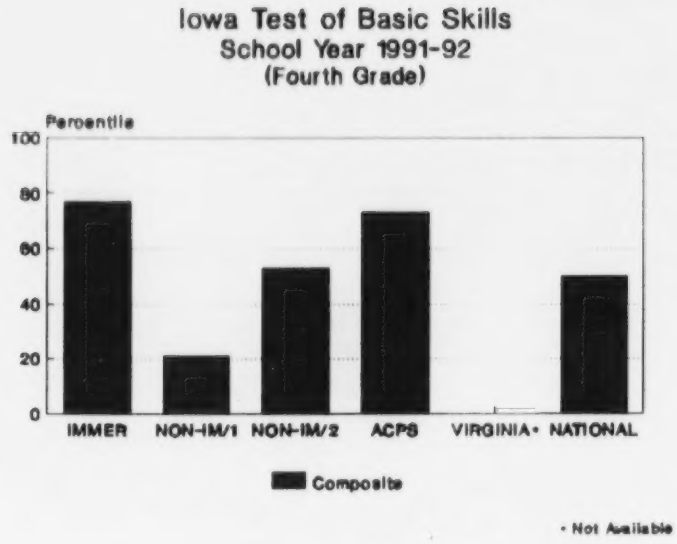
Observations, interviews, questionnaires, and surveys conducted over the four years indicate that the teachers, students, parents, and school community are very satisfied with the immersion program. There was a minimum of three on-site visits each year. Teachers filled out questionnaires and were interviewed annually. A parent survey conducted in January of 1992 yielded positive attitudes toward the program. Key School also participated in a formal self-study in 1993-94. A two-year research project conducted by CAL personnel was completed in June of 1995.

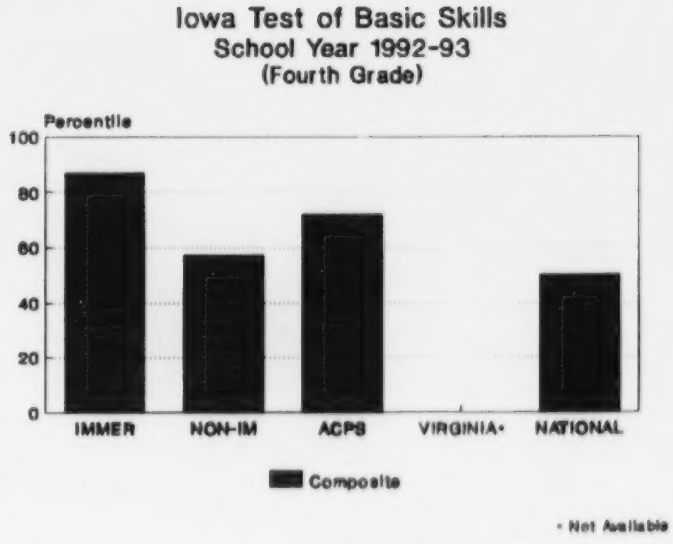
VII. Recommendations

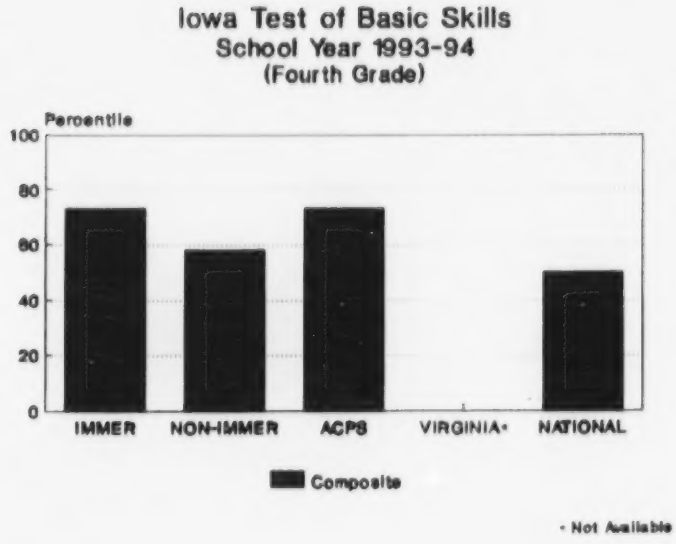
The partial two-way immersion program at Key School is an established program that continues to be a successful example of immersion education. The dedication and commitment of teachers, parents, and staff make the program an outstanding educational opportunity for students. Support from the community and the central administration contributes to its strengths.

Plans for school year 1995-96 include the relocation of Key West students to Key School. Key School will expand the immersion program, as well as the HILT and special education programs for

FIGURE 6


Iowa Test of Basic Skills
School Year 1991-92
(Fourth Grade)
Percentile
100
80
60
40
20
0
IMMER
NON-IM/1
NON-IM/2
ACPS
VIRGINIA*
NATIONAL
Composite
* Not Available


Iowa Test of Basic Skills
School Year 1992-93
(Fourth Grade)
Percentile
100
80
60
40
20
0
IMMER
NON-IM
ACPS
VIRGINIA*
NATIONAL
Composite
* Not Available


Iowa Test of Basic Skills
School Year 1993-94
(Fourth Grade)
Percentile
100
80
60
40
20
0
IMMER
NON-IMMER
ACPS
VIRGINIA*
NATIONAL
Composite
* Not Available

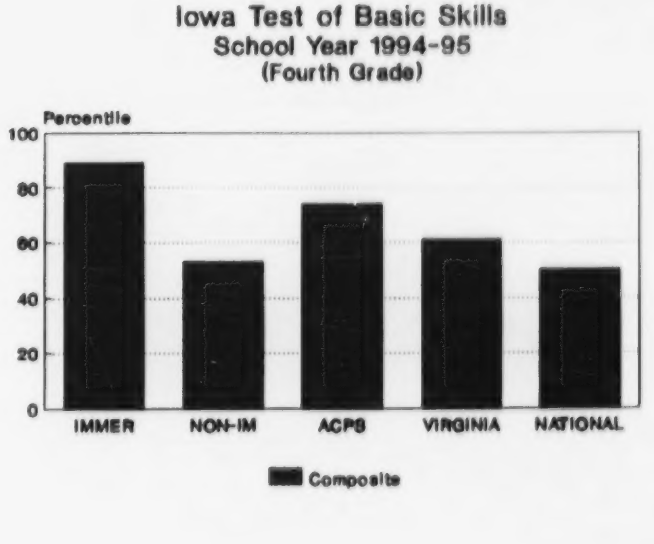
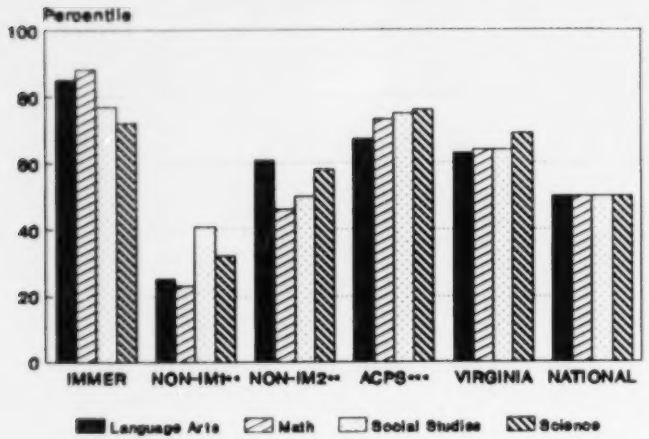

Iowa Test of Basic Skills
School Year 1994-95
(Fourth Grade)
Percentile
100
80
60
40
20
0
IMMER
NON-IM
ACPS
VIRGINIA
NATIONAL
Composite

FIGURE 7

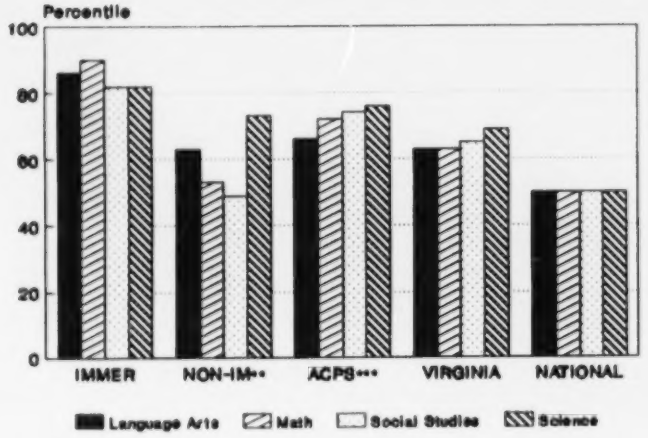
Iowa Test of Basic Skills

Key School

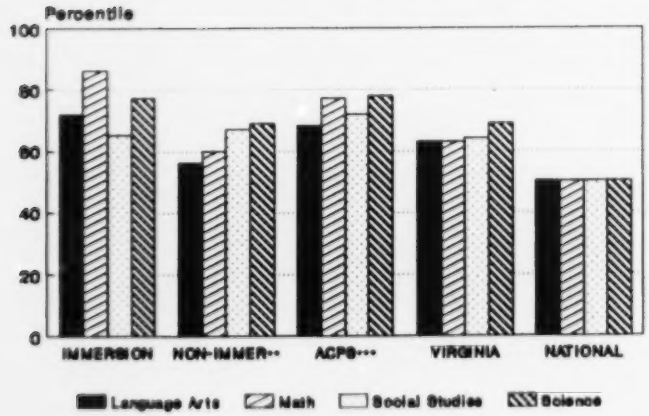
School Year 1991-92



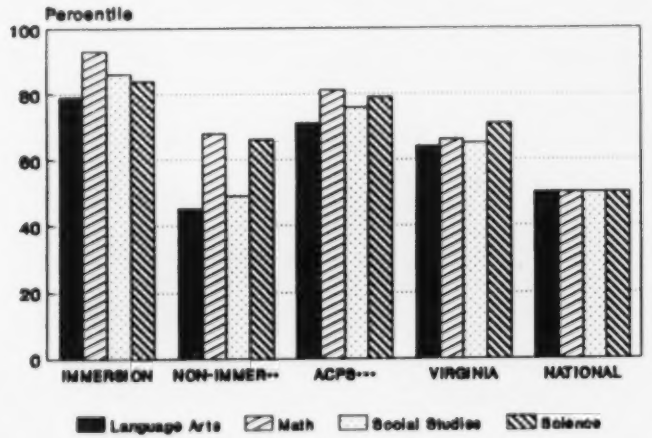
School Year 1992-93



School Year 1993-94



School Year 1994-95



•• Other fourth grade classes at Key
••• Arlington County Public Schools

Spanish speaking students. All other current programs at Key School (1994-95) will be relocated within the Arlington County Public Schools.

The expansion of the immersion program at the middle and high school levels continues to challenge immersion students remaining in the program. Currently, students can participate in a modified immersion program at Williamsburg Middle School. Sixth grade students receive social studies instruction in Spanish and one period of Spanish language arts every other day. In seventh grade, Spanish language arts is offered as well as science in Spanish. Ninth grade includes Spanish language arts and geography in Spanish. Washington-Lee High School offers a continuation immersion program in a modified form, although classes are small due to the limited number of remaining original immersion students who started the program in 1986. The secondary program should strengthen as the number of participating students increases in the elementary schools, including those immersion students from Oakridge and Abingdon Elementary Schools.

We have five recommendations for the future of the program, some of which need to be given top consideration because of the ending of Title VII funding:

- **A yearly evaluation of the entire Arlington immersion program**, with the inclusion of the other elementary immersion programs and the modified secondary program, is recommended for program accountability and improvement.

- As the Key School immersion program expands, additional staff is necessary. The program could benefit from the establishment of a **Teacher Mentoring Program**, which pairs experienced and less experienced teachers. The two-member "team" observes each other's classes and meets periodically to share teaching strategies and materials and offer guidance and support to each other.

- Key School, including the kindergarten immersion program currently funded by Title VII, should be considered for selection by Arlington County Public Schools to **expand the kindergarten program from half days to full days.** This would greatly benefit the immersion students.

- Another vital element of the program's success is the **program coordinator.** This position, paramount in offering support to staff and for public relations (including parents, community,

and professional activities), will need to be funded with school district funds. Attendance and presentations about Key School's immersion program at professional conferences enable valuable interaction among immersion educators.

- Finally, as Arlington County becomes more multicultural, Key School should **continue to include more ethnically diverse students**, such as African-American and Asian-American students, in the English-speaking population of the immersion program.

VIII. Conclusion

With the completion of its ninth year, students in the Spanish/English two-way partial immersion program at Key Elementary School continue to achieve academic success in both languages.

Title VII funding enabled the immersion project to improve, enrich, and expand its established program. A kindergarten level was added in 1991-92. Much needed materials and supplies were purchased. Thematic units and curriculum were developed and implemented. A portfolio assessment was developed and revised annually. Each year, Key School personnel attended and presented at professional conferences throughout the United States.

Assessment in academic areas over four years confirms that students in the partial immersion program continue to progress as well as or better than other students at their grade level. Interviews, questionnaires, surveys, and on-site visits indicate that parents, students, and Key immersion staff are positive about and supportive of the immersion program. All are dedicated to making the program a success.

This evaluation confirms that the English/Spanish two-way partial-immersion program at Key Elementary School is an appropriate and beneficial model for educating English and Spanish speaking elementary school children.

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APPENDIX

A. Student Oral Proficiency Rating

B. CAL Oral Proficiency Exam (COPE) Rating Scale

C. Rubric for Assessment of Writing (District-wide)

D. Hispanic Heritage Celebration

Total Score_____

Student Oral Proficiency Rating*

Student's Name _____ Grade_____ Language Observed_____

School _____ City_____ State_____

Rated by _____ Date_____

DIRECTIONS: For each of the 5 categories below at the left, mark an "X" across the box that best describes the student's abilities.

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
A. Comprehension	Cannot understand even simple conversation.	Has great difficulty following what is said. Can comprehend only "social conversation" spoken slowly and with frequent repetitions.	Understands most of what is said at slower-than-normal speed with repetitions.	Understands nearly everything at normal speed, although occasional repetition may be necessary.	Understands everyday conversation and normal classroom discussions without difficulty.
B. Fluency	Speech is so halting and fragmentary as to make conversation virtually impossible.	Usually hesitant; often forced into silence by language limitations.	Speech in everyday communication and classroom discussion is frequently disrupted by the student's search for the correct manner of expression.	Speech in everyday communication and classroom discussion is generally fluent, with occasional lapses while the student searches for the correct manner of expression.	Speech in everyday conversation and in classroom discussions is fluent and effortless, approximating that of a native speaker.
C. Vocabulary	Vocabulary limitations are so extreme as to make conversation virtually impossible.	Misuse of words and very limited vocabulary make comprehension quite difficult.	Frequently uses the wrong words; conversation somewhat limited because of inadequate vocabulary.	Occasionally uses inappropriate terms or must rephrase ideas because of inadequate vocabulary.	Use of vocabulary and idioms approximates that of a native speaker.
D. Pronunciation	Pronunciation problems so severe as to make speech virtually unintelligible.	Very hard to understand because of pronunciation problems. Must frequently repeat in order to be understood.	Pronunciation problems necessitate concentration on the part of the listener and occasionally lead to misunderstanding.	Always intelligible, though one is conscious of a definite accent and occasional inappropriate intonation patterns.	Pronunciation and intonation approximate a native speaker's.
E. Grammar	Errors in grammar and word order so severe as to make speech virtually unintelligible.	Grammar and word order errors make comprehension difficult. Must often rephrase or restrict what is said to basic patterns.	Makes frequent errors of grammar and word order which occasionally obscure meaning.	Occasionally makes grammatical or word order errors which do not obscure meaning	Grammatical usage and word order approximate a native speaker's.

APPENDIX A 4/7/87

* This form is an adaptation of the Student Oral Language Observation Matrix (SOLOM) developed by the San Jose (California) Unified School District.

Development Associates, Inc.
Arlington, Virginia

Signature of rater _____

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CAL

CAL ORAL PROFICIENCY EXAM (COPE) RATING SCALE FOR SPANISH

STUDENT'S NAME _____ GRADE _____ SCHOOL _____ CITY AND STATE _____ RATED BY _____ DATE _____

	JR. NOVICE LOW	JR. NOVICE MID	JR. NOVICE HIGH	JR. INTERMEDIATE LOW	JR. INTERMEDIATE MID	JR. INTERMEDIATE HIGH	JR. ADVANCED	JR. ADVANCED PLUS	SUPERIOR
COMPREHENSION	Recognizes a few familiar questions and commands.	Understands predictable questions and commands in specified topic areas, though at slower than normal speed.	Can sometimes understand simple questions and commands when applied in new contexts. May understand familiar language at normal speed.	Follows fairly normal conversation with frequent clarifications (non-verbal as well as verbal).	Comprehension problems seldom evident on everyday topics. Carries out commands without prompting. May show some difficulty on unfamiliar topics.	Usually understands speech at normal speed, though some slow-downs are necessary. Can request clarification verbally.	Understands academic talk and social conversation at normal speed. May have trouble with highly idiomatic speech.	Understands complex academic talk and highly idiomatic conversation, though confusion may occur in rare instances.	Has no difficulty in conversation or in academic talk.
FLUENCY	Conversations are limited to an exchange of memorized sentences or phrases.	Operates in a limited capacity within predictable topic areas. Long pauses are common. May start sentences correctly but frequently completes them with gestures or other non-verbal means.	Uses high frequency utterances with reasonable ease. There are signs of emerging originality and spontaneity. Able to complete most sentences verbally.	Satisfies everyday social and academic needs adequately but not fully. Maintains simple conversation by answering questions.	Shows evidence of spontaneity in conversation. Maintains simple narratives. Sometimes initiates talk without relying on questions or prompts.	Maintains conversation with remarkable fluency but performance may be uneven. Uses language creatively to initiate and sustain talk.	Shows high degree of ease of speech. Reports facts easily. Explains points of view and abstract concepts in an uncomplicated fashion.	Handles most academic and social requirements with confidence.	Able to participate fully in social and academic talk. Responds with ease to highly idiomatic conversation, hypothetical situations, and discussions of abstract concepts.
VOCABULARY	Uses memorized utterances and words belonging to learned categories. Does not recognize words or phrases outside the context in which they have been learned.	Has vocabulary for common activities and objects but frequently searches for words. Recognizes known forms outside of learned contexts.	Basic formulas and words for regular activities come readily. Vocabulary adequate to minimally elaborate utterances.	Makes statements and asks questions adequately to satisfy basic social and academic needs but has difficulty explaining or elaborating them.	Permits limited discussion of topics beyond everyday social and academic needs. Attempted circumlocutions may be ineffective.	Broad enough for relatively complete discussion of familiar social and simple academic topics. Sometimes achieves successful circumlocutions.	Uses a variety of idiomatic expressions. Uses circumlocutions effectively.	Complete enough to fully discuss most academic and social topics. Flow of talk is rarely interrupted by inadequate vocabulary.	Vocabulary is extensive and groping for words is rare. Shows familiarity with idiomatic expressions and facility with less common vocabulary which permit discussion of topics in unfamiliar situations.
GRAMMAR	Utterances are usually memorized forms.	Usually achieves correct grammar in familiar patterns but accuracy is easily upset. May have a high rate of self-corrections. Reliance on patterns is greater than reliance on memorized utterances.	Grammar is largely correct for simple familiar language. Isolated forms such as past tense, haber and simple connectors, and direct and indirect object pronouns may be used but cannot be generalized across grammatical structures.	Talk consists primarily of uncomplicated original sentences with correct word order. Makes little use of modifiers. Can use basic connectors such as haber and because accurately. Attempts to use more complex forms are often incorrect.	Sentences show some complexity but may be inaccurate. Uses a variety of verb tenses in specific forms but does not employ the full range of possible conjugations. Pronouns still show evident inaccuracies.	Able to use the complete range of conjugations across tenses for regular verbs but does not have full control of irregular forms. Use of complex connectors, direct and indirect object pronouns usually correct.	Most forms largely but not consistently correct. Has good control of pronouns and sequencing devices— the first, but, then, etc. Shows expanded use of adjectives and adverbs.	Uses all tenses comfortably with a high degree of accuracy, though occasional errors are evident.	Control of grammar and syntax is strong enough that no major patterns of error are revealed.

In "An Oral Assessment Instrument for Immersion Students: COPE," Rhodes, N., Thompson, L. 1990. In Foreign Language Education: Issues and Strategies. (Ed. Padilla, Fairchild, Valadez) Sage.

APPENDIX B

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APPENDIX C

RUBRIC FOR ASSESSMENT OF WRITING ELEMENTARY SCHOOLS

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8 - 7

The writing demonstrates careful attention to the total effect of the piece. The thesis clearly gives the topic and the writer's point of view. The writer develops the topic by choosing related supporting details, arranging the details in the most appropriate organization, using a variety of sentence patterns, and choosing vocabulary thoughtfully. The mechanics of the piece contribute to the whole of the work. The writer demonstrates that audience understanding and interest are essential goals in writing. Relationships are clearly stated to ensure understanding. The writer strives for an original, creative, and honest approach. Language is used well with attention to flow, rhythm, and emphasis. The writing has clarity and style and is enjoyable to read.

---

6 - 5

Papers in this category show thought about the subject. The topic is clearly stated in a thesis, and the topic is supported with well-chosen evidence. The piece has no flaw glaring enough to detract from the sense of the writing. The writer uses mechanics competently. However, the writer takes no risks and primarily uses a formula for organization. In some cases, the choice of subject is unimaginative, lending itself to only the most general written discussion. There is little or no attention to the power of language, and the writer relies on simple relationships and explanations to develop the topic. The writer does not demonstrate an understanding of the total effect of a piece of writing. The writing has clarity and communicates to a reader.

---

4 - 3

The writing shows an honest attempt to address a topic. However, the writer does not actually develop the topic. Supporting details are chosen randomly with some being irrelevant. The writer has a minimum of organization and often neglects to include either a thesis or conclusion. The thinking exhibited in the piece of writing is superficial so that full explanation of the topic does not occur. The writing is often stream of consciousness and egocentric with no awareness of audience. The mechanics detract from the total effectiveness and serve to cloud meaning. Occasionally, the writing may be fairly articulate, but a major flaw in thinking or usage prevents the piece from being successful. The writing has minimal clarity and presents difficulty to a reader.

---

2 - 1

The writer does not narrow the topic or does not seem to understand the topic. The piece may be underdeveloped or undeveloped, but in either case, the writing is totally lacking in clarity. The piece does not include specific details that would make the writer understood, and the writer does not demonstrate organizational ability. Awareness of audience is not evident so that communication is the reader's responsibility. Inhibiting communication further is the writer's inability to use mechanics correctly. Some papers demonstrate that the writer has thought about the topic but does not have the facility with language to communicate that thinking. The writing is incoherent due to major difficulties with written expression.

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CELEBRATING HISPANIC HERITAGE

CELEBRANDO EL MES DE LA HISPANIDAD

PROGRAMA

1. El Nido/The Nest Poema

2. This Land is Your Land
   It's a Small World
   Mr. Lane's Class HILT

4. "Who Discovered America?"
   Talk Show
   Mrs. Pawling's 5th grade class

5. La Raza - A collection of songs and poems
   Mrs. Grimsley and Ms. De la Cruz
   3rd grade classes

6. Sueño Imposible/Imposible Dream
   From a Distance - Songs
   Mrs. Fernandez and Mrs. Kirsch's
   4th grade classes